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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,756	11/17/2003	George S. Pabis	12093/928	3374
26646	7590	03/13/2006		
KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			EXAMINER PALABRICA, RICARDO J	
			ART UNIT 3663	PAPER NUMBER
DATE MAILED: 03/13/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/714,756	PABIS ET AL.	
	Examiner	Art Unit	
	Rick Palabrica	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 2/13/06, which directly amended claim 1 and traversed the art rejection of claims in the 6/7/05 Office action, has been entered.

Applicant's arguments are addressed in section 5 below.

Drawings

2. Figs. 2 and 3 appear to be reproductions of color photographs.

Color photographs and color drawings are not accepted unless a petition filed under 37 CFR 1.84(a)(2) is granted. Any such petition must be accompanied by the appropriate fee set forth in 37 CFR 1.17(h), three sets of color drawings or color photographs, as appropriate, and, unless already present, an amendment to include the following language as the first paragraph of the brief description of the drawings section of the specification:

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

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Color photographs will be accepted if the conditions for accepting color drawings and black and white photographs have been satisfied. See 37 CFR 1.84(b)(2).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The examiner considers the recited elements in method claim as steps in exercising the process.

Claim 1, step 5 states, "positioning the lock fingers to a position below divots in the guide thimble in the fuel assembly to be engaged." Underlining provided. Claim 1, step 6, states: "engaging the lock finger tabs into the divots to an extended position."

There is neither an adequate description nor enabling disclosure as to how and in what manner the lock finger tabs can be engaged into the divots in step 6, when these fingers are positioned below the divots in previous step 5.

Claim 1, step 7 recites the limitation, "lifting the fuel assembly and the tool, wherein structural load of the lifted fuel assembly passes from the divots to the tool." Underlining provided. This limitation means that the divots initially carry the structural load and then transfers this load to the tool. There is neither an adequate description nor enabling disclosure as to how and in what manner a divot, which is an indentation or a dent on a surface, can carry a structural load.

4. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "alignment pins", "shaft", "lower lock fingers", "divots", and "finger tabs". There are insufficient antecedent bases for these limitations in the claim.

Claim 4 recites the limitation "mandrel shaft" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Salton et al. (U.S. 4,834,934).

Applicant traversed Salton et al. in his 2/13/06 Amendment on the ground that, “they teach away from engaging the lock fingers into the divots to an extended position.” The examiner disagrees, as discussed below.

Salton et al. disclose an assembly for gripping the thimble of a fuel assembly and its method of operation (see Figs. 1-11 and col. 6, lines 40+). Salton et al. disclose in Fig. 11 a pressurized water reactor fuel assembly 52 having a top nozzle 139. They show in Fig. 2 their tool (gripping means 32) having alignment pins 134 that engage a top nozzle of the fuel assembly at alignment holes 138 (see Fig. 12 and col. 5, lines 54+). They show in Fig. 1 gripping member 49 of gripping means 32 being disposed inside control rod thimble 50. This gripping member 49 comprises a gripper actuator 97 and deformable sleeve 64 (see Fig. 3).

As to claim 1, applicant has NEITHER: a) defined the term “divot”; NOR, b) identified the specific number and locations of the so-called divots in the guide thimble of the fuel assembly; NOR, c) defined the extent or depth of the bulge or notch associated with each divot.

Absent such definitions, Salton et al. still reads on the amended claims.

As discussed in section 4 above, the lock finger tabs cannot be engaged with the divots unless the tabs are aligned with the divots. The examiner assumes this to be the configuration intended by the applicant in his claims.

Since applicant has not defined the extent or depth of the divots, the examiner reads the term, "divot" on any indentation made on the guide thimble by the fingers of the gripping tool of Salton et al. Note that the tips of the sleeve 64 of Salton et al. inherently creates some degree of indentations on the inner surface of guide thimble 50, when the gripper actuator 97 is translated downwards. This translation results in a radial expansion of the tips of sleeve 64 because of the beveled surface 101 of gripper actuator 97 slides along the corresponding beveled surface 85 of sleeve 64 (see Fig. 3 and col. 4, lines 45+). These indentations are further enhanced and made a bit more pronounced when the fuel assembly has been gripped by the sleeve 64 and the fuel assembly 52 is lifted. This further enhancement results from the further radial expansion of the tips of sleeve 64, when the first frustoconical surface 59 further engages the second beveled inside surface 88 at the tip of sleeve 64 (see Fig. 3 and col. 5, lines 5+).

The indentations created by said expansion of the tips of sleeve 64, which are firstly created by sliding of beveled surface 101 on beveled surface 85, and secondly further enhanced by the frustoconical surface 59, read on applicant's claim language, "divots". While applicant may argue that these indentations are slight, such argument is immaterial because applicant has neither defined the depths nor locations of his divots.

As to the wherein clause in claim 1, the examiner interprets this limitation as the tool carrying the structural load of the fuel, which is exactly what is done by Salton et al.

As to claim 2, this step is inherent in Salton et al.'s method, after their lifting process for a fuel element is completed.

As to claims 3 and 4, applicant's claim language, "mandrel shaft" reads gripper actuator 97. Again, applicant does not specify the degree of shaft rotation and there is inherently some rotation (e.g., twisting) in Salton et al.'s gripping member 49 when it is lowered into the guide thimble (see col. 3, lines 45+).

As to claim 4, Applicant's language "mandrel shaft" reads on gripper actuator 97. The claimed step is equivalent to and has the same effect as the downward translation of gripper actuator 97 which causes the elastically deformable sleeve 64 to radially expand (see col. 4, lined 34+). The elastic deformation of the sleeve is equivalent to the claimed "spring tension applied to the lock fingers."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:30-5:00, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJP
March 6, 2006

A handwritten signature in black ink, appearing to read "R. Palabina". The signature is written in a cursive, flowing style with a large initial "R".